

January 31, 2012

Get out your homework - Green WS4, Pink WS5

$$13) \begin{array}{l} W \\ T \end{array} \frac{3 \text{ in} \cdot 5}{4 \text{ in} \cdot 5} = \frac{15 \text{ in}}{x}$$

$$20 \text{ in} = x$$

$$14) \begin{array}{l} T \\ W \end{array} \frac{12 \text{ in} \div 4}{8 \text{ in} \div 4} = \frac{x}{2 \text{ in}}$$

$$3 \text{ in} = x$$

$$7) \frac{5 \text{ in} \cdot 5}{2 \text{ ft} \cdot 5} = \frac{x}{10 \text{ ft}}$$

$$25 \text{ in} = x$$

$$18) \begin{array}{l} T \\ W \end{array} \frac{3 \text{ in} \div 3}{12 \text{ in} \div 3} = \frac{x}{4 \text{ in}}$$
$$1 \text{ in} = x$$

$$7) \frac{6 \div 3}{\$18 \div 3} = \frac{x}{\$6}$$

$$2 \text{ papayas} = x$$

## 1/31 - Solving Percent Equations using Proportions

"Percent" means...  
out of 100

If you got 22 out of 25 on a quiz, what % is that?

<i>your score</i>					
part	$\frac{22}{25}$	$=$	$\frac{\boxed{88}}{100}$	part	$88\%$
whole				whole	
<i>total possible</i>					

**Identify the part and the whole in each:**

45 is what percent of 50?  
part (score) whole (possible)

75 is 38% of what number?  
part (score) whole (possible)

What is 85% of 46?  
part (score) whole (possible)

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

Solve each by setting up proportions and solving.

What number  $n$  is 75% of 60?

$$\frac{n}{60} = \frac{75}{100}$$

$$\frac{n}{60} = \frac{3}{4}$$

$$n = 45$$

40 out of 56 is what percent?

$$\frac{40}{56} = \frac{p}{100}$$

$$56p = 4000$$

$$p = 71.4\%$$

$$4000 \div 56 = 71.4285714285714$$

Solve each by setting up proportions and solving.

120 is 25% of what number?  
n

$$\frac{120}{n} = \frac{25}{100}$$

$$\frac{25n}{25} = \frac{12000}{25}$$

$$n = 480$$

$$12000 \div 25 = 480$$

45 is what percent of 180?

$$\frac{45}{180} = \frac{p}{100}$$

$$\frac{180p}{180} = \frac{4500}{180}$$

$$p = 25\%$$

$$4500 \div 180 = 25$$

Homework:

Test  
Thursday

Blue Worksheet 6

Due Wednesday